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10/555,857

09/25/2006

Michel Gillard

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EXAMINER

USELDING, JOHN E

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

08/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/555,857 | Applicant(s) GILLARD ET AL. | |
| | Examiner /JOHN USELDING/ | Art Unit 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/15/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-28 is/are pending in the application.
- 4a) Of the above claim(s) 16,18-22,26 and 27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24,25 and 28 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-15, 17, 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Interpretation

Claims 1, 2, and 4-7 claim a binder system but the only component required by the claims is the organosilyl ester of a carboxylic, sulphonic, or phosphoric acid. The remainder of the claim limitations are merely intended uses of the compound. Claiming the compound as an alkaline hydrolysis, erodability booster, or binder component is an intended use of the compound.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Plehiers et al. (WO 2003/027124).

Plehiers et al. teach compositions comprising a compound that is an organosilyl ester of a carboxylic acid wherein the carboxylic acid part of the ester is saturated at the alpha carbon (page 4, lines 1-14).

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Claims 1, 2, 4-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Slater et al. (5,331,074).

Regarding claims 1, 2, and 4-7: Slater et al. teach compositions comprising a compound that is an organosilyl ester of a carboxylic acid wherein the carboxylic acid part of the ester is saturated at the alpha carbon (column 6, lines 46-68). Since the compound is being used as a crosslinking agent it is considered a binder component.

Regarding claims 8-10 and 13: Slater et al. teach that their composition is an anti-fouling paint composition (column 1, lines 5-13, 25-27; column 9, lines 30-36). Since the compound is being used as a crosslinking agent it is considered a binder component. The composition uses an excess of crosslinking agent (column 5, lines 34-53), therefore, after the crosslinking occurs there will still be remaining organosilyl esters of a carboxylic acid in the composition.

Regarding claim 12: Slater et al. teach a method of preparing paint by adding their organosilyl ester of a carboxylic acid (column 5, lines 34-53).

Regarding claim 14: Slater et al. teach that the hydrocarbon residue is 3 carbons or greater with the following examples: n-pentyl, 3-heptyl, n-pentadecyl, cyclopentyl, or cyclohexyl (column 6, lines 46-54).

Regarding claims 15 and 17: Slater et al. teach an organosilyl ester of the formula $(Y^1)_aSi(OCOR^1)_{4-a}$ (column 6, lines 46-56). Y^1 is a hydrocarbon radical having 1 to 10 carbon atoms (column 6, lines 1-2). R^1 is a hydrocarbon group that is without aliphatic unsaturation (column 6, lines 48-52), which means that the alpha carbon is

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unsaturated. All the example compounds meet the Applicant's formula and have more than one acyloxy group attached to the silicon atom (column 6, lines 57-68).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slater et al. (5,331,074) as applied to claim 8 above.

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Regarding claim 11: by mixture, the Examiner understands this term to mean more than one type of silyl ester is present. Slater et al. teach using mixtures of crosslinking agents (column 6, lines 44-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a mixture of acyloxysilane crosslinking agents (column 6, lines 46-67) in the composition to provide crosslinking of the polymers.

Slater et al. teach that the composition comprises a polydiorganosiloxane and siloxane polymer binder component (column 3, lines 51-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a polydiorganosiloxane or siloxane polymer with a vinyl group (column 4, line 12) to form an elastomer (column 1, lines 64-68).

Allowable Subject Matter

Claims 24, 25, and 28 are allowable over the prior art. Slater et al. fail to teach a triorganosilyl(meth)acrylate copolymer and the prior art fails to provide a motivation to include such a copolymer in the invention of Slater et al.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 4-15, 17, 23-25, and 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /JOHN USELDING/ whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:00am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN USELDING/
Examiner
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/Marc S. Zimmer/
Primary Examiner, Art Unit 1796